Supplement to the
Environmental Assessment
(Issued January 10, 2001)
for the
Isles Dernieres Barrier Island Restoration
and Coastal Wetland Creation
New Cut Dune/Marsh Restoration Project
(TE-11A/TE-37)
Terrebonne Parish, Louisiana

This supplement to the preliminary Environmental Assessment (EA) supporting the preliminary Finding of No Significant Impact (FNSI) issued for public notice on January 10, 2001, is in response to comments from the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS). The proposed project would fill in the breach and re-connect the east end of Trinity Island with East Island to prevent continued erosion of those barrier islands. The Louisiana Natural Heritage Program (LNHP) has periodically conducted surveys for piping plovers throughout their range and has documented plovers on the east end of Trinity Island during each of those surveys (i.e., 1988: 34 individuals; 1991: 29 individuals; 1992: 57 individuals; and 1996: 45 individuals reported for east and west ends of Trinity) and on East Island during the 1996 (29 individuals) survey. Individual piping plovers are known to return to the same wintering sites year after year (Nicholls and Baldassarre 1990, Drake 1999) and are expected to be present in the project area in the winter.

The supplement incorporates into the EA the recommendations developed in cooperation with the FWS and the NMFS to address their concerns over potential impacts to Essential Fish Habitat (EFH) and to the wintering and nesting populations of piping plovers in the project area. Specifically, the FWS is concerned that unless the design of the project is modified, the project will contribute to a cumulative reduction in the amount of intertidal habitat. These recommendations are additional mitigative actions intended to protect the species and do not alter the FNSI. The recommendations of the FWS[1] are as followings:

- Fish and Wildlife Resources - *Colonial Nesting Waterbirds*: According to the Louisiana Department of Wildlife and Fisheries' Natural Heritage Program (LNHP) database, colonial nesting waterbirds, particularly black skimmers and least terns, have been documented using Trinity and East Islands.

  - Although those colonies are not currently active, surveys will be conducted by qualified personnel during the colonial waterbird nesting season to identify the presence and location of any new or re-activated colonies.

  - No construction or maintenance work and related surveys will be conducted within 1,500 feet of any waterbird nesting colonies during the nesting season (i.e., mid-February to September, depending on the species present).

- On-site agency and contract personnel will be informed of the need to identify and avoid impacting colonial waterbirds during the nesting season, and all contracts will contain a statement prohibiting work within 1,500 feet of any active nesting colonies.

- Threatened and Endangered Species

Piping Plover: The threatened piping plover (*Charadrius melodus*) winters in coastal Louisiana, and occurs within the proposed project area. Piping plovers may be present in Louisiana for 8 to 10 months, arriving from the breeding grounds as early as late July and remaining until late March or April. Piping plovers feed extensively on intertidal beaches, mudflats, sandflats, algal flats, and wash-over passes with no or very sparse emergent vegetation and require unvegetated or sparsely vegetated areas for roosting. Roosting areas may have debris, detritus, or micro-topographic relief offering refuge to plovers from high winds and cold weather. In most areas, wintering plovers are dependent on a mosaic of habitat patches, and move among these patches depending on local weather and tidal conditions. A study of 48 wintering piping plovers in south Texas found a mean home range size of 3,117 acres, with a mean distance moved per individual of approximately 2 miles (Drake 1999). Wintering plovers in Louisiana depart for the breeding grounds during late March and early April so that when construction is planned to begin in April or May, most birds have left the wintering grounds.

Threat to Species.

- Major threats to this species include the loss and degradation of habitat due to development, disturbance by humans and pets, and predation.

- Because any plovers remaining in the project area during construction would be displaced to other suitable habitats in the vicinity, the proposed project is not likely to adversely affect the piping plover.

Threat to Habitat.

- On July 7, 2000, the FWS published a proposed rule in the Federal Register that would designate critical habitat for wintering piping plovers in Texas, Louisiana, Mississippi, Alabama, Florida, Georgia, South Carolina, and North Carolina. The impacts of the proposed project on critical habitat would be minimal and temporary.

- Although the proposed project will fill in the sandflat/overwash area on the east end of Trinity Island, only a relatively small amount of habitat will be affected when compared to the amount of critical habitat available. In addition, re-connecting Trinity and East Islands will create new suitable habitat (beach) for the piping plover on the gulfside of the islands and prevent/reduce erosion of existing habitat in the vicinity. Therefore, the proposed project will not adversely modify critical habitat for wintering piping plovers.

Brown Pelican. Endangered brown pelicans (*Pelecanus occidentalis*) are currently known to nest on Raccoon Point on Isles Dernieres, Queen Bess Island, Plover Island (Baptiste Collette),

and islands in the Chandeleur chain and St. Bernard Parish. Although no brown pelican nesting sites are known to occur in the proposed project area, they may use the project area for feeding and/or loafing. Brown pelicans feed in shallow estuarine waters, using sand pits and offshore sand bars as rest and roost areas.

Threat to Species or Habitat. The proposed project would create new feeding and loafing areas for the pelican while preventing/reducing erosion of existing habitat. Also, any pelicans utilizing the project area during project construction could easily relocate to other locations. Therefore, the proposed project is not likely to adversely affect the brown pelican.

The recommendations of the NMFS are as follows;

EFH conservation recommendations:

- All of the 400-foot wide marsh platform along the bayside edge should be constructed at an elevation of +2 feet NAVD (North American Vertical Datum). An internal training dike should be incorported to ensure the vertical transition between the 340-foot wide, +4 feet NAVD "marsh" platform and the 400-foot wide, +2 foot NAVD marsh platform. The interal dike should be degraded during final grading and shaping and prior to demobilization by the contractor.

- The project design should provide a maximum vertical tolerance restriction of 0.5 feet for the +2 foot NAVD marsh platform.

- The project design should stipulate the use of land based, access corridors leading from California Canal to the work area during project construction. Widths and alignments of the corridors should be appropriately sized for the type of equipment to access the site and aligned to avoid and minimize impacts to vegetated wetlands. Regulatory authorizations and construction contract documents should depict and define the work access corridors and strictly prohibit traversing vegetated wetland outside the access corridors and work area.

On February 3, 2001, in response to the Louisiana Department of Natural Resources (LDNR) Section 404 permit application, the U.S. Army Corps of Engineers (COE) notified the LDNR of the FWS and NMFS concerns. The LDNR addressed the concerns by letter dated February 19, 2001, to the COE and has agreed to take the following actions:

- LDNR shall take all necessary precautions to avoid impacts to wintering and nesting populations of piping plovers in the project area, both during construction and future operation and maintenance work.

- LDNR has modified the proposed plans and has excluded approximately 15 acres of shallow water habitat from the project's footprint.

- LDNR has modified the design elevation on approximately 15 additional acres on the eastern side of the existing cut to create a marsh platform with an elevation of +2 (NAVD) with a construction tolerance of +/- 0.5 feet.

- LDNR shall conduct surveys in coordination with the LDWF, EPA and FWS to document any nesting birds and other avian activities in the area.

- LDNR shall coordinate all construction activities within 1500 feet of the documented nesting sites with the LDWF, EPA and FWS.

- LDNR will modify its application for a Section 404 permit to include a separate access channel that will allow equipment and pipeline to be offloaded without having to traverse the vegetated portion of the island. The contractor will be required to backfill the channel as part of the demobilization.

- LDNR will take precautions to avoid impact to oyster leases with the installation of turbidity screens and by requiring the contractor to locate the weir/spill box in the location that will least likely impact the oyster leases.

- In the event additional money remains at project completion, this money shall be used to create additional intertidal habitat behind the island. Should construction activities consume the budget before project completion, then the elevation of the back platform will be reduced.

The construction access route has been coordinated with LDWF and is shown on the construction plans. Copies of "As Built" (May 1998) plots from the East and Trinity projects graphed next to data measured from the survey conducted for this project (October 2000) were provided. The plots show supertidal elevations have been converted into intertidal elevations. This has occurred in a matter of 1.5 years.

Figure 1-1: Project Layout
Figure 1-2: Typical Section "A" looking easterly reference profile 12
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Figure 1-5: Sand Fence Layout
Figure 1-6: Sand source Map
Figure 1-7: Typical Section Primary Access
Figure 1-8: Sand Fence Details
Figure 1-9: Typical Borrow Section

1. **Literature Cited**

Drake, K. R. 1999. Movements, habitat use and survival of wintering piping plovers. M. S. Thesis. Texas A&M University-Kingsville, Kingsville, TX. 81 pp.

Nicholls, J. L. and G. A. Baldassarre. 1990. Winter distribution of piping plovers along the Atlantic and Gulf Coasts of the United States. Wilson Bulletin 102(3):400-412.